

AMENDMENT TO THE CLAIMS

Please amend the claims without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents, as follows.

**In the Claims:**

1. (Original- Allowed) A process for preparing a phenolic polymer via polymerization of phenolic monomers having unsaturated aliphatic chains in the presence of peroxidase biocatalyst and an oxidant, wherein said polymerization uses as a mediator a phenothiazine derivative substituted with an alkyl group or alkyl carbonic acid.
2. (Original- Allowed) The process according to claim 1, wherein said phenothiazine derivative is used in a concentration of 20-100  $\mu$ M with respect to the total reactant.
3. (Original- Allowed) The process according to claim 1, wherein said phenothiazine derivative is ethyl phenothiazine or phenothiazine-10-propionic acid.
4. (Original- Allowed) The process according to claim 1, wherein said phenolic monomer is a plant phenolic oil.
5. (Previously presented- Allowed) The process according to claim 1, wherein said peroxidase biocatalyst is a plant- or fungus-derived peroxidase.
6. (Original- Allowed) The process according to claim 1, wherein said oxidant is hydrogen peroxide or hydroalkyl peroxide.
- 7-13.
14. (Previously Presented- Allowed) The process according to claim 5, wherein said peroxidase biocatalyst is a plant- or fungus-derived peroxidase selected from the group consisting of horseradish peroxidase, soybean peroxidase, Coprinus peroxidase and Aspergillus peroxidase.
15. (Previously Presented- Allowed) The process according to claim 2, wherein said phenothiazine derivative is ethyl phenothiazine or phenothiazine-10-propionic acid.

16. (Previously Presented- Allowed) The process according to claim 15, wherein said phenolic monomer is a plant phenolic oil.

17. (Previously Presented- Allowed) The process according to claim 16, wherein said peroxidase biocatalyst is a plant- or fungus-derived peroxidase selected from the group consisting of horseradish peroxidase, soybean peroxidase, Coprinus peroxidase and Aspergillus peroxidase.